



UNIVERSITY OF LEEDS

This is a repository copy of *Market orientation, marketing capability, and new product performance: the moderating role of absorptive capacity*.

White Rose Research Online URL for this paper:  
<http://eprints.whiterose.ac.uk/101560/>

Version: Accepted Version

---

**Article:**

Najafi-Tavani, S, Sharifi, H and Najafi-Tavani, Z (2016) Market orientation, marketing capability, and new product performance: the moderating role of absorptive capacity. *Journal of Business Research*, 69 (11). pp. 5059-5064. ISSN 0148-2963

<https://doi.org/10.1016/j.jbusres.2016.04.080>

---

© 2016, Elsevier. Licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International  
<http://creativecommons.org/licenses/by-nc-nd/4.0/>

**Reuse**

Unless indicated otherwise, fulltext items are protected by copyright with all rights reserved. The copyright exception in section 29 of the Copyright, Designs and Patents Act 1988 allows the making of a single copy solely for the purpose of non-commercial research or private study within the limits of fair dealing. The publisher or other rights-holder may allow further reproduction and re-use of this version - refer to the White Rose Research Online record for this item. Where records identify the publisher as the copyright holder, users can verify any specific terms of use on the publisher's website.

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.



[eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk)  
<https://eprints.whiterose.ac.uk/>

**Market orientation, marketing capability, and new product performance: the moderating role of absorptive capacity**

Saeed Najafi-Tavani, Institute for Management and Planning Studies

Hossein Sharifi, University of Liverpool

Zhaleh Najafi-Tavani, University of Leeds

February 2016

The authors thank Dr. Ghasem Zaefarian, University of Leeds, and Dr. Sahar Mousavi, University of Manchester, for their careful reading and suggestions. Send correspondence to Saeed Najafi-Tavani, Management Division, Institute for Management and Planning Studies, Number 6, Mokhtar-Asgari St., Niavaran, Iran, ([S.NajafiTavani@imps.ac.ir](mailto:S.NajafiTavani@imps.ac.ir)); Hossein Sharifi, University of Liverpool Management School, Chatham Building, Liverpool L69 7ZH, UK, ([h.sharifi@liverpool.ac.uk](mailto:h.sharifi@liverpool.ac.uk)); Zhaleh Najafi-Tavani, Leeds University Business School, Maurice Keyworth Building, Leeds, LS29JT, UK, ([Z.NajafiTavani@leeds.ac.uk](mailto:Z.NajafiTavani@leeds.ac.uk)).

### **Abstract**

The recent marketing literature identifies market orientation and marketing capabilities as key concepts that firms should use to achieve their competitive advantages. Previous research also confirms cross effects of these dimensions in firms' performance. The present study extends the literature on this subject by introducing absorptive capacity (AC) as a moderator of the relationship among market orientation, the interaction of market orientation and marketing capability, and firms' new product performance. This study empirically examines the research model using survey data from 188 manufacturing firms in Sweden. The findings confirm previous studies that claim a positive relationship among market orientation, marketing capability, and new product performance. More importantly, the results indicate that AC positively moderates the relationship between market orientation and firms' new product performance. Furthermore, the findings suggest that experts should consider AC as a competitive factor in line with the complimentary effect of market orientation and marketing capability. This consideration would contribute to explain better firm-related performance, such as new product performance.

**Keywords:** New product performance; market orientation; absorptive capacity; marketing capability; dynamic capability

## 1. Introduction

The dynamic capability (DC) literature consistently focuses on the importance of marketing capabilities (MC), which the literature defines either as the sum of mid-level marketing activities (Vorhies & Morgan, 2005) or as higher-level marketing capabilities (Merrilees et al., 2011). MC can significantly affect the effectiveness of the marketing strategy implementation (Morgan et al., 2012) and thus overall firms' performance (Vorhies & Morgan, 2005). In this regard, Day's (2011) conceptual address of the subject suggests a widening gap between market complexity and organizations' marketing capabilities, and calls for a redefinition of these capabilities to add new adaptive capacities to anticipate market changes and become more responsive to them. To avoid rigidity, organizations should enhance such capabilities to acquire new and future-looking intelligence from the market and develop higher-level capabilities such as market sensing and customer-linking capabilities. The potential source of such intelligence is market orientation (MO), which the firm primarily deploys to scan and acquire market intelligence (Vorhies et al., 2011).

On the other hand, MO, which is the process of generating and disseminating market intelligence to create and offer better value to the customer (Kohli & Jaworski, 1990), is a source of advantage for the firm (Kirca et al., 2005; Zhou et al., 2009). MO is "inherently a learning orientation" (Hurley & Hult, 1998, p. 42). In contrast, Morgan et al. (2009) argue from a DC perspective that MO as a resource can only be effective to firm's performance objectives with the support of complementary market-related organizational capabilities. This study concurs with the above resource-oriented arguments, which suggest a complementary relationship between MO and MC, as well as a combined effect of the two in enhancing firm performance (Morgan et al., 2009). However, this study proposes that these recent views cannot fully explain the DC-oriented marketing approach to competitiveness without considering the role and effect of another type of organizational capacity: absorptive capacity

(AC). This capacity consists in absorbing and deploying knowledge in the organization; DC literature refers to AC as organizational DC (Floyd & Lane, 2000; Zahra & George, 2002).

MO is a learning orientation, or as Slater and Narver (1994) suggest, the combination of MO with a learning orientation results in better organizational performance. Slater and Narver (1994) equate MO with the process of learning, behavior change, and performance improvement. One of the components of MO is inter-functional coordination (Lukas & Ferrell, 2000), which is about the coordinated application of resources for generation and dissemination of market intelligence (Slater & Narver, 1994). The organizational learning and DC theories suggest that success of the process of intelligence gathering and deployment depends on the firm's AC (Javalgi et al., 2014) Therefore, this study proposes that AC plays a moderating role in the relationships between MO and the combined effect of MO and MC on firm performance, according to new product success.

This article's structure is as follows: after discussing the theoretical background, the article develops the hypotheses. Then, the article explains the method and presents the results of a statistical analysis. The study concludes with a discussion of key findings and directions for further research.

## **2. Theoretical framework and hypotheses**

The increasing level of market dynamics drives competition on innovation and new product introduction to new levels. In response, firms should pursue proper value-adding strategies and implementing them by acquiring and deploying resources to match their business environment (Ambrosini & Bowman, 2009; Lamore et al., 2013). DC theory explains and supports this approach to competitiveness, suggesting a new range of capabilities to implement new strategies and to make appropriate use of their limited resources (Eisenhardt & Martin, 2000). This theory posits that possession of such capabilities can

differentiate firms in the competition from their rivals (Bingham et al., 2007; Teece, 2007). Dynamic capabilities involve complex sets of knowledge and skills, which play a coordinating and inter-functional role to reflect the emergent circumstances and reconfigure organizational resources and capabilities (Teece, 2007). Dynamic capabilities also support other organizational capacities, such as capturing value in the process (Katkalo et al., 2010), and reconfiguring or transforming resources and capabilities (Katkalo et al., 2010; Teece, 2007). Therefore, to support firm competitiveness, DC should deal with and manage various types of capabilities, which complement each other to lead to new and reshaped offerings to the market (Katkalo et al., 2010).

One kind of such capabilities is MO strategies of the firm, an approach for generation and dissemination of market intelligence (Kohli & Jaworski, 1990; Morgan et al., 2009). Morgan et al. (2009) propose that MO requires complementing market-relating organizational capabilities to enable firms to respond to the market intelligence they generate. Building on the theoretical ground, the research model (Figure 1) aims to undertake an empirical research on the subject. The model posits that two sets of complementary capabilities in the organization, namely MO and MC, influence firms' competitive performance in innovation and new product performance (NPP). Furthermore, this study expects a combined effect of MO and MC on NPP, while a third type of organizational capability, AC, moderates both the effect of MO and the combined effects of MO and MC on NPP. The article further formulates theoretical propositions for empirical examination.

Figure 1 here.

## 2.1. MO, MC, and their combined effect on NPP

MO strategies of the firm are largely about the ongoing monitoring of customers' current and latent needs and market and competition conditions. Using MO, firms prepare and

respond to these needs by innovating and introducing appropriate products and services (Atuahene-Gima et al., 2005). MO therefore primarily aims at generation and dissemination of proper market intelligence (Kohli & Jaworski, 1990; Morgan et al., 2009) to give the firm a knowledge advantage (Morgan et al., 2009). Numerous studies find a positive association between MO and business and innovation performance (e.g., Gonzalez-Benito et al., 2009; Kirca et al., 2005; Laforet, 2008). The knowledge advantage of the firm leads to more relevant and superior products to address the markets' circumstances (Slater & Narver, 1994). Therefore:

H1: The firm's market orientation has a positive relation with the firm's NPP.

Research shows concern over the view that capabilities such as MO can have the expected influence in the absence of other complementing capabilities. For instance, Ketchen et al. (2007) find that MO (as a resource) only have potential value. Murray et al. (2011) argue that to capitalize on MO, firms need to take appropriate strategic actions. They propose that internal processes in relation to marketing (marketing capabilities) should be functional for MO to influence performance. Morgan et al. (2009) also refer to the less attended set of MC) which in fact are essential for deploying MO strategies. They consider MC a combination of mid-level marketing activities (Vorhies & Morgan, 2005) and higher-level marketing capabilities (Merrilees et al., 2011), necessary for marketing strategy development and execution. These capabilities are in fact important resources for firms, supporting them in achieving superior performance (Morgan et al., 2009; Vorhies & Morgan, 2005). Therefore:

H2: The firm's marketing capabilities have a positive association with the firm's new product performance.

On the other hand, firms need strong and current market intelligence in their approaches and mechanisms to improve their marketing capabilities (Vorhies et al., 2011). The MO capabilities of the firm can provide new knowledge of the market, thus leading to

improved and new customer-centered marketing capabilities. The combination of the previous arguments presents a two-way interaction of MO and MC. Morgan et al. (2009) refer to the potential interplay between firm 'know-what' knowledge resources and its complementary 'know-how' capabilities for deployment of resources. Therefore, the interaction of these two sets of capabilities would put the firm in a stronger position for introducing the real wants of the market and hence perform better than the rivals (Eisenhardt & Martin, 2000; Morgan et al., 2009). Organizational learning and DC theories both support the notion of such an effect. The underlying product of MO and MC is knowledge, which the firm absorbs, institutionalizes, and deploys giving the firm advantage and benefits of economies of scope (Danneels, 2007). Besides, as the DC theory proposes, one of the functions of DC is to present a complex set of capabilities which makes imitation difficult for the rivals (Teece, 2007). Morgan et al. (2009) argue that the combination of MO and MC provides such advantage, creating an obscured picture of the source of advantageous performance for the rivals, hence preventing competitors to follow quickly. Following Morgan et al. (2009) this study hypothesizes that:

H3: The combination of the firm's MO and MC positively affects the firm's NPP.

## 2.2. AC and deployment of market intelligence

AC is an organization-level process that involves the acquisition and assimilation of external knowledge. The absorbed knowledge should enable the organization to adapt and evolve by reconfiguring its resources to meet current and anticipated needs and to respond to changes in firm's business environment (Zahra & George, 2002). As such, AC satisfies the criteria of a DC (Zahra & George, 2002). The general agreement is that AC is a multidimensional construct involving the ability to value, assimilate, and apply knowledge (Cohen & Levinthal, 1990). Scholars also define AC as the skills that the organization needs



to deal with the tacit component of external knowledge, and the need to modify this capability to the benefit of the organization (Teece, 2007). Szulanski (1996) finds that lack of AC is a major setback for the firm to introduce improvement and best practice.

Researchers also find a causal relationship between AC's effectiveness and NPP of the firm (Yao et al., 2013). Javalgi et al. (2014) argue that collection of intelligence from the market is not the same as winning the market, and state that learning capacity and firm performance influence the effects of customer-oriented selling. MO should therefore contribute to the success of the firm by introducing new products, providing both the required intelligence and the capacity for assimilating and applying the absorbed knowledge. On the other hand, AC has an inter-functional coordination role in the application of resources for market intelligence generation (Lukas & Ferrell, 2000). Jansen et al.'s (2005) research finds a significant association between measures of inter-functional coordination and AC. Therefore: H4: Absorptive capacity positively moderates the relationship between market orientation and the firm's new product performance.

Finally, drawing on the discussion of the role and position of AC as a key in defining DC, the study's arguments about the complementary effects of resources and capabilities would lead to a further insight in the matter. Considering the arguments for the third research hypothesis, from a DC perspective, marketing capabilities and market intelligence complement each other to lead to superior performance of the firm. MO brings required market intelligence into the approaches and mechanisms of MC, while MC gives means for deploying the customer-oriented decisions taken after the intelligence collection in the MO process. This study also argues that the know-what advantage arising from MO, to be effective, requires support from organizational capacity for learning and assimilation of knowledge. This means that the know-what advantage of the firm reflects in its AC,

suggesting a complementary effect of the three factors, MO-MC-AC, which collectively contribute to the performance of the firm's new products.

H5: The interaction among firm's MO, MC, and AC positively affects the firm's NPP.

### **3. Method**

#### **3.1. Sample and data collection**

The authors collect primary data for testing the research hypotheses via an online questionnaire survey of Swedish manufacturing firms, using Swedish Business Directory as a sampling frame. Professional translators translate the questionnaire from English into Swedish and again into English to reduce concern regarding the face validity of measures. To further ensure the content and face validity of the measures, the authors conduct seven in-depth interviews with academic peer and manufacturing managers to confirm the relevance and completeness of items present in the research questionnaire. Data collection takes place in early 2015. The vice presidents and marketing managers of 720 firms received an email with the link to the questionnaire. From this process, 188 usable questionnaires result, demonstrating a response rate of 26 %. The responding companies belong to various manufacturing sectors, including metal, automotive parts, medical, engineering manufacturing, food, and plastic, and their sizes ranged from 18 to 14,500 employees.

To check the possibility of common method bias, this study run a variant of Harman's one factor test (Malhotra et al., 2006). This test loaded all items into one common factor resulting in a very poor fit ( $X^2_{(df=275)} = 1053.69$ , CFI = 0.73, NFI = 0.67), suggesting that common method bias is not problematic.

#### **3.2. Measures**

The five-item scales of new product performance derive from the study of Langerak et al. (2004), which reflects the financial and market-related performance of firm new product. For the measures of MO dimensions, the study adopts 16 item scales from Morgan et al. (2009) and Jaworski and Kohli (1993). The MO items focus on behaviors related to firms' information acquisition, information dissemination, and information responsiveness. The study measured marketing capability with a six-item scale from Vorhies and Morgan (2005) and Ngo and O'Cass (2012). These six items collectively measure market-related capabilities such as product development, pricing, channel management, marketing communications, market planning, and marketing implementation. The study measures AC using six items originally by Tu et al. (2006) aiming to measure employee knowledge, manager knowledge, communications network, communications climate, and knowledge scanning. The study also includes firm size and age as control variables.

#### **4. Analysis**

##### **4.1. Reliability, validity, and descriptive statistics**

LISREL 8.8 uses confirmatory factor analysis (CFA) with a covariance matrix as input and maximum likelihood estimation to purify the measurements and to evaluate the dimensionality, validity, and reliability of the measurement scales. The final model after removing seven items with poor performance, produces a good fit, with  $X^2_{df=260} = 572.05$ ; CFI = 0.97; NFI = 0.94; NNFI = 0.96; IFI = 0.97; SRMR = 0.057 and RMSEA = 0.08. The composite reliability (CR) and average variances (AVE) for each research construct are higher than the cut-off points of 0.7 and 0.5 respectively (Bagozzi et al., 1991). Furthermore, all item loadings in the model are above 0.6 and significant at the 0.01, representing convergent validity (Bagozzi et al., 1991). Table 1 shows the summary of measurement analysis.

Table 1 here.

The study also evaluates discriminant validity, comparing the squared correlation of two constructs against their individual AVE (Fornell & Larcker, 1981). Table 2 shows that, for all constructs, the AVE is higher than the squared inter-construct correlation estimates (SIC), indicating that the model's constructs satisfy the criteria of discriminant validity.

Table 2 here.

#### 4.2. Results

The study tests the hypothesized relationships using hierarchical regression analysis. The study centers all measures (except for those of the NPP as dependent variable) to avoid multi-collinearity problems (Mason & Perreault, 1991). Model 1 contains control variables (i.e., firm age and number of employees). Next, the analysis introduces MO, marketing capability, and AC in model 2. Then, the interaction terms MO×MC as well as MO×AC incorporate into model 3. Finally, model 4 contains the interaction term MO×MC×AC. Table 3 shows the results. Although the addition of the main factors in model 2 increases the R<sup>2</sup> by 0.44, the addition of interaction terms MO×MC and MO×AC (model 3) to model 2 further increases R<sup>2</sup> by 0.04. Furthermore, the addition of interaction term between MO×MC×AC (model 4) to model 3 increases R<sup>2</sup> by only 0.02. The F-values for the incremental R<sup>2</sup> values achieve a 0.05 level statistical significance.

In model 2, both MO and MC relate significantly to new product performance (MO: 0.41,  $p < 0.001$ ; MC: 0.17,  $p < 0.05$ ); thus supporting H1 and H2. After considering the interaction terms in model 3, the coefficient estimate for the interaction term MO×MC is positive but insignificant (0.03,  $p > 0.05$ ); hence, the results fail to support H3. On the other hand, the coefficient estimate for the interaction term between MO and AC is significant (0.21,  $p < 0.05$ ), claiming that AC positively moderates the relationship between MO and new

product performance; thus, the result supports H4. Finally, in model 4, the coefficient estimate for the interaction term  $MO \times MC \times AC$  is positive and significant, which supports H5. In other words, the combined effect of MO, marketing capability, and AC further strengthens firm NPP.

Table 3 here.

## **5. Discussion and conclusions**

This study contributes to both DC and Marketing Strategy literature by extending recent studies (i.e., Morgan et al., 2009) through investigating the relationships between MO, MC, AC, and NPP. Theoretically, this study finds that the role of organizational capacity for absorbing and assimilating the knowledge from external sources is key to understand the effects of MO on firm performance. Empirically, this finding finds support when AC acts as a complementary dimension to the areas of influence in NPP, from the point of view of previous research on complementary capability combinations (e.g., Morgan et al., 2009; Ngo & O’Cass, 2012).

The statistical analysis confirms previous research (e.g., Kirca et al., 2005), claiming that MO positively affects NPP (H1). MO is present in a set of skills and capabilities representing firms’ knowledge assets (Kohli & Jaworski, 1990; Morgan et al., 2009), which not only result in new product success (Baker & Sinkula, 2005; Tsai et al., 2008), but also facilitate other capabilities of firms to “become more distinctive (relative to the competition) over the long run, resulting in sustainable competitive advantage” (Kumar et al., 2011, p. 17). The confirmation of this effect in the present study, which takes place in a different context, complements the previous views and strengthens the support for resource-based and DC perspective. At the same time, despite the use of subjective measures, the confirmation of the hypotheses disagrees with Morgan et al.’s (2009) report. This result may owe to the focus on

new product as the indication of firm performance and possible context effects. The managerial implication of this finding is that managers should encourage firms' information acquisition, information dissemination, and information responsiveness, to strengthen the new-product-related performance.

Furthermore, MC has a positive association with NPP (H2), which is in line with earlier studies in the marketing literature (e.g., Mu, 2015). MC are necessary for marketing strategy development and execution, which enables firms to achieve customer-related advantage with respect to customer satisfaction, relationship building, and retention (Ngo & O'Cass, 2012), resulting in superior firm performance such as NPP (Vorhies & Morgan, 2005). The managerial implication of this finding is that MC, as important market-related capabilities, are an essential element in facilitating firms' success in new product introduction, because these capabilities are valuable and difficult for competitors to imitate.

More importantly, the statistical results confirm the positive moderating effect of absorptive capacity on the relationship between MO and new product performance (H4). This result strongly confirms the organizational learning and dynamic capability perspective, which posit that success of firm process of intelligence gathering and deployment depend on firm capacity to absorb and exploit the received or collected knowledge (Javalgi et al., 2014). Thus, the MO-NPP association depends on the absorptive capacity of the firm. The high capacity of firms to identify, absorb, and assimilate relevant market information and knowledge strengthens the effect of MO on firm product-related performance by offering innovative products to the market. Additionally, in DC theory, this result presents a clear support of the asset complementarity effects.

Although recent studies in marketing literature highlight the importance of complementary capability combinations (e.g., resources-capabilities and capabilities-capabilities) (Morgan et al., 2009; Ngo & O'Cass, 2012), this research's findings do not

support the positive and significant effect of the interaction between MO and MC on NPP(H3). Although this result contrasts with Morgan et al.'s (2009) finding, the result supports the argument suggesting that experts should consider both AC and the complimentary effect of MO and MC to explain better firm performance such as NPP (H5). In other words, this study's findings suggest that firms' MO, such as market-based knowledge resource, marketing capabilities, and ability to absorb and exploit fruitful knowledge complement one another in a productive way and strengthen the firms' NPP.

The study also answers Morgan et al.'s (2009) suggestion to consider the quality of MO in the firm for its effects on firm performance. The study shows that the presence of AC would enhance the quality of MO, which finds confirmation when AC joins the combination of MO×MC, making the new combination (MO×MC×AC) associate significantly with firm NPP.

This study has a number of limitations that scholars may consider as opportunities for future research. Firms' subjective NPP is the dependent variable, which might have restricting effects on the outcome and the analysis. Drawing on dynamic capability theory, this research considers the role of MO, MC, AC, and their complementary effect to account NPP. Firms currently operate in a highly turbulent environment; therefore, future study may investigate the role of potential organizational strategic capabilities such as agility (Sharifi et al., 2006) and its combination with other organizational orientation (i.e., MO and supply chain orientation) and capabilities and resources (i.e., MO and AC) in this context. In the same vein, the effects of environmental turbulence factors (market, competition, and technology turbulence) on the process of deploying MO, MC, and their interaction could provide further insight in the subject.

## References

- Ambrosini, V., & Bowman, C. (2009). What are dynamic capabilities and are they a useful construct in strategic management? *International Journal of Management Reviews*, 11(1), 29–49.
- Atuahene-Gima, K., Slater, S. F., & Olson, E. M. (2005). The contingent value of responsive and proactive market orientations for new product program performance. *Journal of Product Innovation Management*, 22(6), 464–482.
- Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly*, 36(3), 421–458.
- Baker, W. E., & Sinkula, J. M. (2005). Market orientation and the new product paradox. *Journal of Product Innovation Management*, 22(6), 483–502.
- Bingham, C. B., Eisenhardt, K. M., & Furr, N. R. (2007). What makes a process a capability? Heuristics, strategy, and effective capture of opportunities. *Strategic Entrepreneurship Journal*, 1(1-2), 27–47.
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128–152.
- Danneels, E. (2007). The process of technological competence leveraging. *Strategic Management Journal*, 28(5), 511–533.
- Day, G. S. (2011). Closing the marketing capabilities gap. *Journal of Marketing*, 75(4), 183–195.
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10-11), 1105–1121.
- Floyd, S. W., & Lane, P. J. (2000). Strategizing throughout the organization: Managing role conflict in strategic renewal. *Academy of management review*, 25(1), 154–177.



- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement errors. *Journal of Marketing Research*, 18(1), 39–50.
- Gonzalez-Benito, O., Gonzalez-Benito, J., & Munoz-Gallego, P. A. (2009). Role of entrepreneurship and market orientation in firm's success. *European Journal of Marketing*, 43(3/4), 500–522.
- Hurley, R. F., & Hult, G. T. M. (1998). Innovation, market orientation, and organizational learning: An integration and empirical examination. *Journal of Marketing*, 62(3), 42–54.
- Jansen, J. J. P., Van Den Bosch, F. A. J., & Volberda, H. W. (2005). Managing potential and realized absorptive capacity: How do organizational antecedents matter? *Academy of Management Journal*, 48(6), 999–1015.
- Javalgi, R. G., Hall, K. D., & Cavusgil, S. T. (2014). Corporate entrepreneurship, customer-oriented selling, absorptive capacity, and international sales performance in the international B2B setting: Conceptual framework and research propositions. *International Business Review*, 23(6), 1193–1202.
- Jaworski, B. J., & Kohli, A. K. (1993). Market Orientation: Antecedents and Consequences. *Journal of Marketing*, 57(3), 53–70.
- Katkalo, V. S., Pitelis, C. N., & Teece, D. J. (2010). Introduction: On the nature and scope of dynamic capabilities. *Industrial and Corporate Change*, 19(4), 1175–1186.
- Ketchen, D. J., Hult, G. T. M., & Slater, S. F. (2007). Toward greater understanding of market orientation and the resource-based view. *Strategic Management Journal*, 28(9), 961–964.
- Kirca, A. H., Jayachandran, S., & Bearden, W. O. (2005). Market orientation: A meta-analytic review and assessment of its antecedents and impact on performance. *Journal of Marketing*, 69(2), 24–41.

- Kohli, A. K., & Jaworski, B. J. (1990). Market Orientation: The Construct, Research Propositions, and Managerial Implications. *Journal of Marketing*, 54(2), 1–18.
- Kumar, V., Jones, E., & Venkatesan, R. (2011). Is market orientation a source of sustainable competitive advantage or simply the cost of competing?. *Journal of Marketing* 75(1): 16–30.
- Laforet, S. (2008). Size, strategic, and market orientation affects on innovation. *Journal of Business Research*, 61(7), 753–764.
- Lamore, P. R., Berkowitz, D., & Farrington, P. A. (2013). Proactive/responsive market orientation and marketing-research and development integration. *Journal of Product Innovation Management*, 30(4), 695–711.
- Langerak, F., Hultink, E. J., & Robben, H. S. J. (2004). The impact of market orientation, product advantage, and launch proficiency on new product performance and organizational performance. *Journal of Product Innovation Management*, 21(2), 79–94.
- Lukas, B. A., & Ferrell, O. C. (2000). The effect of market orientation on product innovation. *Journal of the Academy of Marketing Science*, 28(2), 239–247.
- Malhotra, N. K., Kim, S. S., & Patil, A. (2006). Common method variance in is research: A comparison of alternative approaches and a reanalysis of past research. *Management Science* 52(12), 1865–1883.
- Mason, C., & Perreault, W. (1991). Collinearity, power, and interpretation of multiple regression analysis. *Journal of Marketing Research*, 28(3). 268–280.
- Merrilees, B., Rundle-Thiele, S., & Lye, A. (2011). Marketing capabilities: Antecedents and implications for B2B SME performance. *Industrial Marketing Management*, 40(3), 368–375.

- Morgan, N. A., Katsikeas, C. S., & Vorhies, D. W. (2012). Export marketing strategy implementation, export marketing capabilities, and export venture performance. *Journal of the Academy of Marketing Science*, 40(2), 271–289.
- Morgan, N. A., Vorhies, D. W., & Mason, C. H. (2009). Market orientation, marketing capabilities, and firm performance. *Strategic Management Journal*, 30(8), 909–920.
- Mu, J. (2015). Marketing capability, organizational adaptation and new product development performance. *Industrial Marketing Management*, 49, 151–166.
- Murray, J. Y., Gao, G. Y., & Kotabe, M. (2011). Market orientation and performance of export ventures: the process through marketing capabilities and competitive advantages. *Journal of the Academy of Marketing Science*, 39(2), 252–269.
- Ngo, L. V., & O'Cass, A. (2012). Performance implications of market orientation, marketing resources, and marketing capabilities. *Journal of Marketing Management*, 28(1-2), 173–187.
- Sharifi, H., Ismail, H. S., & Reid, I. (2006). Achieving agility in supply chain through simultaneous “design of” and “design for” supply chain. *Journal of Manufacturing Technology Management*, 17(8), 1078–1098.
- Slater, S. F., & Narver, J. C. (1994). Does competitive environment moderate the market orientation-performance relationship? *Journal of Marketing*, 58(1), 46–55.
- Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, 17(1), 27–43.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350.

- Tsai, K. H., Chou, C., & Kuo, J. H. (2008). The curvilinear relationships between responsive and proactive market orientations and new product performance: A contingent link. *Industrial Marketing Management*, 37(8), 884–894.
- Tu, Q., Vonderembse, M. A., Ragu-Nathan, T. S. & Sharkey, T. W. (2006). Absorptive capacity: Enhancing the assimilation of time-based manufacturing practices. *Journal of Operations Management*, 24(5), 692–710.
- Vorhies, D. W, & Morgan, N. A. (2005). Benchmarking marketing capabilities for sustainable competitive advantage. *Journal of marketing*, 69(1), 80–94.
- Vorhies, D. W., Orr, L. M, & Bush, V. D. (2011). Improving customer-focused marketing capabilities and firm financial performance via marketing exploration and exploitation. *Journal of the Academy of Marketing Science*, 39(5), 736–756.
- Yao, Z., Yang, Z., Fisher, G. J., Ma, C., & Fang, E. (2013). Knowledge complementarity, knowledge absorption effectiveness, and new product performance: The exploration of international joint ventures in China. *International Business Review*, 22(2), 216–227.
- Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, re-conceptualization, and extension. *Academy of Management Review*, 27(2), 85–203.
- Zhou, K. Z., Brown, J. R., & Dev, C. S. (2009). Market orientation, competitive advantage, and performance: A demand-based perspective. *Journal of business research*, 62(11), 1063–1070.

Figure 1. Conceptual framework

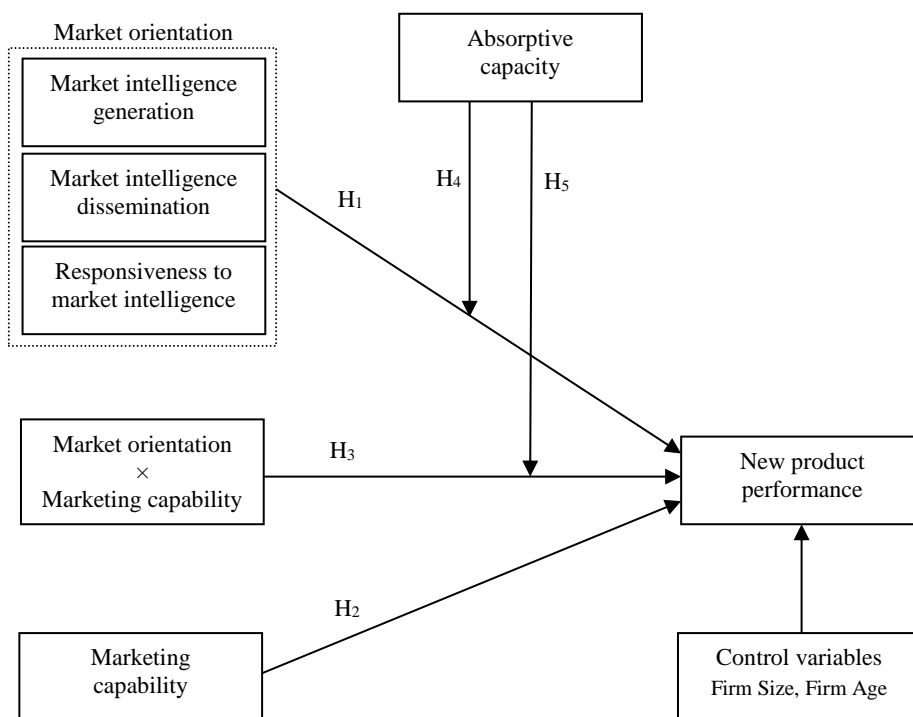


Table 1. Summary statistics of the measurement analysis

Variable	Mean	SD	Item Loading*	AVE	CR	Cronbach's Alpha
New Product Performance	4.66	1.2	0.73-0.85	0.63	0.84	0.82
		3				
Market intelligence generation	5.18	1.2	0.65-0.78	0.53	0.82	0.81
		8				
Market intelligence dissemination	4.86	1.4	0.60-0.81	0.53	0.77	0.76
		0				
Responsiveness to market intelligence	5.51	1.2	0.66-0.83	0.52	0.81	0.81
		2				
Absorptive capacity	5.08	1.2	0.71-0.80	0.56	0.86	0.86
		5				
Marketing capability	5.46	1.3	0.76-0.88	0.66	0.92	0.92
		1				
Firm size	3.95	1.6	n/a	n/a	n/a	n/a
		5				
Firm Age	2.59	0.9	n/a	n/a	n/a	n/a
		5				

\*item loadings after deleting values less than 0.6. The natural logarithm value was assigned to each control variables instead of the original value; Complete list of items and their loadings are available upon request.

Table 2. Squared inter-construct correlation estimates and related AVEs

	(1)	(2)	(3)	(4)	(5)	(6)
(1) New Product Performance	<b><u>0.63</u></b>					
(2) Market intelligence generation	0.13	<b><u>0.53</u></b>				
(3) Market intelligence dissemination	0.16	0.49	<b><u>0.53</u></b>			
(4) Responsiveness to market intelligence	0.17	0.38	0.33	<b><u>0.52</u></b>		
(5) Absorptive capacity	0.20	0.40	0.39	0.50	<b><u>0.56</u></b>	
(6) Marketing capability	0.21	0.36	0.34	0.41	0.44	<b><u>0.66</u></b>

Notes: The bold, underlined figures on the diagonal are AVEs.

Table 3. Hierarchical regression analysis

Variable	Model 1	Model 2	Model 3	Model 4	VIF
Size	-0.06 (-0.60)	-0.02 (-0.27)	-0.04 (-0.52)	-0.02 (-0.33)	1.37
Age	0.22 (2.34)*	0.02 (0.29)	0.03 (0.44)	0.03 (0.39)	1.44
MO		0.41 (4.78)***	0.35 (3.74)***	0.26 (2.67)**	2.95
AC		0.19 (2.09)*	0.14 (1.58)	0.07 (0.70)	2.67
MC		0.17 (2.05)*	0.19 (2.31)*	0.09 (1.06)	2.36
MOxAC			0.21 (2.46)*	0.15 (1.80)	2.16
MOxMC			0.03 (0.36)	0.03 (0.38)	2.29
MOxMCxAC				0.29 (2.59)*	3.88
R <sup>2</sup>	0.04	0.48	0.52	0.54	
Adj-R <sup>2</sup>	0.03	0.46	0.50	0.52	
F-Value	2.96	25.59***	21.53***	20.41***	

\*\*\*, p<0.001; \*\*, p<0.01, \*, p<0.05; T-values are in parentheses.